

## LUMBER DRIERS.

Manufacturers of lumber who ship by rail or by cargo in vessels, begin to realize the importance of seasoning lumber at the mill. The patent dryers now in use render it possible, at light expense, to season lumber so rapidly as to make it practicable for nearly every mill to thoroughly season the lumber cut, before it goes into the pile. Our readers are aware that there are several different patent processes for seasoning lumber, and there is no doubt that each process has peculiar merits. The *Northwestern Lumberman* recently interviewed Hon. L. G. Mason, of Muskegon, Mich., and as the interview affords a full description of the Mason Lumber Co's., extensive plans for seasoning lumber, we publish the article in full.

R.—What is the capacity of this Drier?

Mr. M.—The present building will deliver about 80,000 feet of lumber daily, but our furnaces and other preparations are designed for a drying capacity of over 100,000 feet per day.

R.—What is the size of the Dry-House?

Mr. M.—One hundred feet by one hundred and forty feet, with ten feet ceilings in the drying chamber.

R.—Will you explain the process?

Mr. M.—First, as to our furnace; these are four in number, set contiguous, with aggregate dimensions of forty-two feet long, ten feet high and thirteen feet wide, each one being provided with a "self feed." They are set over two hundred feet from the mill. From the lath and picket machines, a steam carrier conveys all the edgings, saw-dust and other waste, not required to run our boilers, to these furnaces and delivers them

into the "self feeds;" one well grown lad being all the manual labor and care required to secure an equal distribution of the fuel.

Nearly all your readers will understand that the getting rid of the edgings and other waste of the mill, constitutes a great and constant expense. In most mills it is hauled oway to a safe distance, often a mile, by teams, and there burned; other mills have "Offal Burners," costing from \$3,700 to \$7,000 constructed near the mill, in which the waste is burned. In all cases the only object accomplished, is to get rid of the waste. In these furnaces we cheaply get rid of all the waste, and at the same time utilize the heat by drying all the lumber we cut, except the culls and such low grades as would not be benefited by seasoning, though we may find that it will pay to dry all we cut, if only to save freights. From the furnaces the heat is conducted into a sub-chamber and delivered through apertures in the floor, into the drying chamber among the lumber, which is piled on low cars to nearly the height of the room. Each car will carry about 5,000 feet; and the entire drying room, when filled, will contain about seven hundred thousand feet.

At the opposite end of the room, 140 feet distant, apertures in the floor are provided, through which the foul air, which has become cooled and has expended its drying power, passes into a sub-chamber leading to the exhaust stack, which is nearly 100 feet high, and thence out into the open air. Except these apertures for ingress and egress of the heated air, the drying chamber is made as nearly air tight as possible.

We have already tested our furnaces and they prove a triumphant success, and in a few days, probably by the tenth of August, we will have the whole in operation as designed. Then we shall run in on the cars at one end of the building say 80,000

feet of lumber, each day, until the room is filled. The cars once in, are moved forward sufficiently, each day, to allow the day's supply to enter. When once full, a day's cut is taken out of the one end of the building dry, and the then present days cut is run it at the other end; seven or eight days being required to dry a given day's cut. You will see then, that the drier being once filled, it will deliver the amount of our daily cut of lumber perfectly dry, every day, except culls and low grades.

R.—Have you faith to believe that this Drier will perform all that is claimed for it?

Mr. M.—My faith is measured by my works. If you will walk with me to the mill and Drier I will show you the structure, and from its dimensions, and the platforms, cars, tracks, and other preparations necessary to properly operate it, you will conclude that we would not have made all this expenditure without the "faith which doubts not."

We shall have to throw away our cigars, as no smoking is allowed in the mill or about the yards.

Going to the mill, constituted a healthful walk, the landed property of this company being almost as large as a German Principality; and during the walk Mr. M. "interviewed" our reporter, but the facts elicited are not important to our readers.

While answering questions our reporter's eye took in the broad acres of territory which constitute the mill and yard grounds of the company, the most of which has been reclaimed from the waters of Muskegon Lake, on the borders of which it is situated. Mr. Mason and Mr. Charles S. Davis, both "forty-niners," of California, where they first met and "struck hand," started this business here some fifteen years ago, being also pioneers in this locality, then almost a wilderness, now a flourishing city of some 8,000 inhabitants.

About three years ago they formed

their property and business into a stock company, taking in as associate stockholders, the Secretary Mr. Thomas Munroe, to whom, our reporter is indebted for courtesies, and Mr. James S. Wheeler, who, with Mr. Davis, manages the Chicago branch of the business.

Our reporter can more briefly tell his *veni vidi*,—"and was conquered!" in his own language. Here he saw one of, if not the most complete friction mills in the country, of capacity of 140,000 feet per day of eleven hours. Extensive booming waters, and docks, including "central wharf," whereat the Goodrich line of steamers daily land; and next, that which he came to see—the "Illinois Dry House Company's combined Offal Burner and Lumber Drier." In this, as in all their works, is seen the enterprise and liberality of the company. A mammoth structure, sitting on piles over the waving waters of the lake; its mighty furnaces, a youthful hell; its cloud reaching stack, a monument at once to its builders and to B. R. Hawley, the inventor and patentee of this system of drying, who has personally superintended this structure; and the whole constituting an instance of daring enterprise, even genius, to the like of which the progress of America is indebted.

Returning to the office, our reporter delved for further facts as follows:

R.—Mr. Mason, granting all you, the inventor and owners claim, for this drying enterprise, how valuable do you believe it to be to the lumber business generally?

Mr. M.—Sir, it will revolutionize it. It is the "Emancipation Proclamation," freeing the mill owners and manufacturers from their serfdom to the commission men of Chicago and other sales centers.

R.—At what expense do you expect to be able to ship dry lumber as compared with your present ship

ments of green lumber?

Mr. M.—The owners of the patents claim that we can deliver lumber dry in Chicago, as cheaply as we now do, direct from the saws.

I think it will add about the cost of once handling. Perhaps I am mistaken. But the most valuable feature of this process, will be, that it will enable the manufacturer to sell, and ship by rail to interior dealers and consumers, thus receiving the price now paid to the yard men in Chicago. So far the present season, our west shore manufacturers, selling their lumber on the market at Chicago, have received practically nothing for stumpage, whatever of profit there may be, being absorbed by the commission men and dealers.

R.—How much more is dry lumber worth than green?

Mr. M.—On an average about \$3.00 per thousand.

R.—Then every mill owner and manufacturer must adopt this process?

M. M.—Most certainly sir. They cannot afford to be without. For example, a dealer in Indianapolis desire to buy a quantity of lumber, say fencing. His freights would be \$40 per car from Muskegon. If he bought green lumber, he would load 6,000 feet on each car, freight per thousand \$6.66.

If he bought dry lumber he could load at least 10,000 feet—freight per thousand, \$4.00. Here then is a loss of \$2.66 per every 1,000 feet of lumber on freights alone, by rail. Hereafter we can afford to sell him this lumber dry, nearly, or quite, as cheap as we now can green, and we would sell as cheap to him as to the Chicago dealers. Suppose to-day he buys this same lumber, dry, of the Chicago dealer; this must be added to our price—

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|--|--------|
| Lake freights.....   | \$1.50 |
| Storage, piling, and delivering from yard, and interest and insurance..... | 3.00   |
|  | <hr/>  |
|  | 4.50   |

Therefore, you see, on every thousand feet of lumber, there is and has been in the past a loss of \$4.50, and this is a low estimate. Take six hundred million feet of lumber cut in these three counties of Muskegon, Ottawa and Kent, and your pencil will tell you that our annual loss has been \$2,700,000! And for the two and one-half billions which Michigan cut in 1873, you and your readers may make your own figures, it makes me sick!

R.—What is the annual cut of Muskegon and other points in Michigan?

Mr. M.—Muskegon county cut in 1873, at Muskegon, 329,988,825 feet; and at White Lake, 83,176,168 feet. Ottawa, an adjoining county, with Grand Haven for its outlet, cut 117,535,000 feet. Kent the other adjoining county, with Grand Rapids for its business centre, and whose outlet is solely by railroad, cut 68,696,387 feet; these three adjoining counties, therefore, cut, in 1873, the grand total of 600,000,000 feet. Ludington cut 83,670,191 feet; Manistee, 183,245,071 feet; Flint, 80,250,000; Saginaw, 619,867,021 feet; the "Shore District," from Saginaw north, 213,490,265 feet; making, with minor localities, an aggregate for 1873, of nearly, or quite, two and one-half billion feet!

R.—Your statements and figures are astounding!

Mr. M.—This subject has still another valuable feature. It will induce the establishment of numerous wood-making manufactories at or near the mills, and thereby save great quantities of lumber, which now goes to waste, not being suitable for shipment—saving again by shipping the finished article instead of the rough material.

I have advocated the establishment here of a lumbermen's exchange, and of a local market for dry and faced lumber, but have never been able to secure the necessary co-operation.

Now, the Mason Lumber Company will have a local market for dry lumber, and instead of laboring to make rich the middle men of Chicago and other sales centers, we will take good care that what profit there is between the pine stump and the consumer shall fall into rightful hands, at least so far as our pine stumps are concerned, and those rightful hands are the manufacturers and mill owners.

And, again, we will be thus fulfilling a fundamental law of political economy, namely, giving our product to the consumer, at the least possible cost to him, while securing suitable profits to the labor and capital we employ. Now, probably an average of \$5.00 per thousand feet is added to the price of lumber between the time it leaves the manufacturer and the time it reaches the consumer. This sum is made up of freights on the water in green lumber, which is about fifty per cent of its whole weight; commission, to middle men, and interest and insurance while piled in yards to dry. This is far too much, and aggregates an enormous loss annually to this industry.

#### PROPOSED LUMBER CONVENTION.

A convention of lumbermen similar to the one recently held at Williamsburg, Pa., is proposed to be held sometime in September at Chicago. A circular addressed to the lumbermen of the Northwest is being issued, asking their opinion of the proposed meeting, and requesting pledges of attendance. If this "feeler" is satisfactorily responded to, the Chicago Lumbermen's Board of Trade will take immediate measures to render the gathering one of interest and profit to the great fraternity of the Northwestern states. That the idea will be greeted with favor by the mill-men of the northern and central Wisconsin, the *Times* doubts not.—*Oshkosh Times*.

#### THE PINE WOODS OF PENNSYLVANIA.

Lumber operators and consumers in this state are awakening to a knowledge of the important fact that the pine timber resources of Pennsylvania are not inexhaustible, as they have apparently long been considered. The state was once one of the leading pine producers in the union. The dense forests bordering the Susquehanna, and traversed by its many tributaries; the mountains of the Monongahela Valley, and in fact the tall and majestic trees that covered thickly much of the area of whole counties in the state, were a few years ago thought to contain pine enough to amply comply with the law of supply and demand for the present, and to furnish timber for a future however distant. That impression the march of events has thoroughly dispelled. The forests of the Delaware Valley have yielded no pine for years, and the resources of the timber regions of the Alleghany and Monongahela have been drawn upon so largely to supply the market of the Ohio Valley, that, in a comparatively short time, their pine forests will be exhausted. Eastern markets must, therefore, look to the counties of the northern part of the state for their supplies of Pennsylvania pine. Philadelphia and Baltimore have been amply furnished with this timber from the latter region for years, but an increasing demand from interior markets, and the inadequacy of the Monongahela and Alleghany countries to respond to it has awakened much alarm among the operators of the Susquehanna Valley, and they are earnestly considering means by which the recklessness of management and waste of timber, so notorious in the past, may be stopped, and the inevitable day, that is at best not distant, when pine lumbering will no longer be one of the great interests of Pennsylvania, postponed as long as possible,